

Heritage Ranking Form - State Rank

Scientific Name: Oncorhynchus mykiss gairdneri

Common Name: Inland Columbia Basin redband trout

Classification: Vertebrate Animal

Range Extent: F = 20,000-200,000 sq km (~8,000-80,000 sq mi)

Current range extent of unhybridized Inland Columbia Basin redband outside the zone of anadromy: 102,210 sq km (Gunckel 2012).

Population Size: FG = 10,000 - 1,000,000 individuals

Comments: Population of redband outside zone of anadromy with less than 10% hybridization estimated at 48,000-145,000 individuals (Gunckel, 2012).

Number of

Occurrences: B = 6 - 20

Comments: Area of occupancy includes approximately 16 8 digit HUCs and 4,670 individual stream segments. 20 EOs based on 10 stream-km separation distance.

Area of Occupancy: G = 2,001-10,000 1-km² grid cells

Comments: Current area of occupancy of non-hybridized Inland Columbia Basin redband outside the zone of anadromy: 4,574 stream-km. An additional 3,977 stream-km, are present but have more than 10% hybridization (Gunckel 2012).

Good Viability: BD = Very small to moderate percent (<21%) of area

Comments: 1% of occupied habitat rated as Excellent (13% as Good). Approximately one third of the occupied streams are documented to have non-native fish co-existing with redband.

Environmental

Specificity: Not Evaluated

Comments: None

Short Term Trends: U = Unknown

Comments: No information available on short term trends. Anecdotal information on local declines, but these are not quantified, and not available across the range.

Long Term Trends: D = Decline of 50 - 70%

Comments: Historic distribution of non-anadromous populations in OR estimated to be 19,838 stream-km (May et al. 2012). Current OR distribution 8,551 stream-km.

Threat Impact: AB = Very High - High

Comments: Pervasive and significant threats from barriers, genetic introgression, habitat degradation and fragmentation, and stream warming due to climate change (Thurrow et al. 2007, May et al. 2012, USDA Forest Service 2014).

Intrinsic Vulnerability: Not Evaluated

Comments: None

Heritage Rank: S2S3

Comments: This rank is for non-hybridized (less than 10% genetic introgression) Inland Columbia Basin redband outside the zone of anadromy. Does not include Interior Closed Basin redband. Broad distribution within Oregon, but local extirpations and population declines have been documented. Significant threats from non-native species, barriers, habitat degradation, and climate change. No documentation of short term declines, but if this becomes available it will likely bump the rank to S2.

Rank Notes: None

Reference: May, B.E., B.J. Writer, and S. Albeke. 2012. Redband trout status update summary. Unpublished report prepared by Wild Trout Enterprises, LLC, Bozeman MT| Gunckel, S. 2012. ICP Redband Trout database.| Thurrow, R. F., B. E. Rieman, D. C. Lee, P. J. Howell, and R. D. Perkinson. 2007. Distribution and status of redband trout in the interior Columbia River Basin and portions of the Klamath River and Great Basins. In: Redband Trout: Resilience and Challenge in a Changing Landscape. Oregon Chapter, American Fisheries Society. pp 28-46.| USDA Forest Service. 2014. NorWest StreamTemp Database and Models. <http://www.fs.fed.us/rm/boise/AWAE/projects/NorWeST.html> StreamNet, May 2003. [Accessed 8/5/14]. URL: <<http://www.streamnet.org/online-data/GISData.html>>.

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